

APPENDIX A

VERSION WITH MARKINGS TO SHOW CHANGE

IN THE SPECIFICATION

Please amend the specification on page 31, lines 22-38 as follows:

The cell suspension is generally centrifuged and the pellet containing the inclusion bodies resuspended in buffer which does not dissolve but washes the inclusion bodies, *e.g.*, 20 mM Tris-HCl (pH 7.2), 1 mM EDTA, 150 mM NaCl and 2% [Triton-X 100] TRITON-X-100™, a non-ionic detergent. It may be necessary to repeat the wash step to remove as much cellular debris as possible. The remaining pellet of inclusion bodies may be resuspended in an appropriate buffer (*e.g.*, 20 mM sodium phosphate, pH 6.8, 150 mM NaCl). Other appropriate buffers will be apparent to those of skill in the art.

IN THE CLAIMS:

31. (once amended) The kit in accordance with claim 29 further comprising a plurality of probes each [of which comprises a polynucleotide sequence associated with senescence] comprising a polynucleotide sequence independently selected from the group consisting of SEQ ID NO:1, 2, 38, 55, 61, 67, 69, 70, and 73; and  
a label for detecting the presence of said plurality of probes.

APPENDIX B

PENDING CLAIMS CURRENTLY UNDER EXAMINATION

1. (as filed) An isolated nucleic acid comprising a polynucleotide sequence associated with the senescence of a cell, said polynucleotide sequence encoding a protein that specifically binds to antibodies raised against a protein encoded by SEQ ID NO:1.
2. (as filed) The isolated nucleic acid of claim 1 wherein the sequence has at least 85% sequence identity with SEQ ID NO:1.
3. (as filed) The isolated nucleic acid of claim 1 wherein the sequence has at least 95% sequence identity with SEQ ID NO:1.
6. (previously once amended) An isolated nucleic acid comprising a polynucleotide sequence associated with the senescence of a cell, said polynucleotide sequence being at least about 80% identical to a nucleic acid sequence as set forth in SEQ ID NO:1 over a region at least about 32 nucleotides in length when compared using the BLASTIN algorithm with a Wordlength (W) of 11, M=5, Cutoff=100 and N=-4.
7. (previously twice amended) An isolated nucleic acid comprising a polynucleotide sequence associated with the senescence of a cell, wherein said polynucleotide sequence hybridizes to a nucleic acid having a sequence as set forth in SEQ ID NO:1 under stringent conditions, which comprise hybridization in a solution comprising 50% formamide at 42°C and washing in a solution comprising 0.2x SSC wash at 65°C.
8. (as filed) An isolated nucleic acid comprising a polynucleotide sequence associated with G0-arrested cells, said polynucleotide sequence encoding a protein that specifically binds to antibodies raised against a protein encoded by SEQ ID NO:2.

9. (as filed) The isolated nucleic acid of claim 8 wherein the sequence has at least 85% sequence identity with SEQ ID NO:2.

10. (as filed) The isolated nucleic acid of claim 8 wherein the sequence has at least 95% sequence identity with SEQ ID NO:2.

11. (once amended) The isolated protein of claim 8 which is encoded by SEQ ID NO:2.

29. (previously once amended) A kit for detecting whether a cell is undergoing senescence, said kit comprising:  
a probe which comprises a polynucleotide sequence selected from the group consisting of SEQ ID NO:1, 2, 38, 55, 61, 67, 69, 70, and 73; and  
a label for detecting the presence of said probe.

31. (previously once amended) The kit in accordance with claim 29 further comprising a plurality of probes each comprising a polynucleotide sequence independently selected from the group consisting of SEQ ID NO:1, 2, 38, 55, 61, 67, 69, 70, and 73; and  
a label for detecting the presence of said plurality of probes.

32. (as filed) The kit in accordance with claim 31 wherein said probes are immobilized on a solid support.

33. (as filed) The kit in accordance with claim 29 wherein said solid support is a chip.

38. (once amended) A kit for detecting whether a cell is G0-arrested, said kit comprising:

a probe which comprises a polynucleotide sequence selected from the group consisting of SEQ ID NO:1, 2, 38, 55, 61, 67, 69, 70, and 73; and  
a label for detecting the presence of said probe.

55. (previously once amended) A kit for detecting whether a fibroblast cell is aging, said kit comprising:

a probe which comprises a polynucleotide sequence selected from the group consisting of SEQ ID NO:1, 2, 38, 55, 61, 67, 69, 70, and 73; and  
a label for detecting the presence of said probe.

62. (previously once amended) A kit for detecting whether a skin cell is aging, said kit comprising:

a probe which comprises a polynucleotide sequence selected from the group consisting of SEQ ID NO:1, 2, 38, 55, 61, 67, 69, 70, and 73; and  
a label for detecting the presence of said probe.